

WHAT IS CLAIMED IS:

- 1 1. An apparatus comprising:
 - 2 means for identifying a player in a supply chain, the player having one or more goals;
 - 3 means for identifying a decision in the supply chain, the decision having a plurality of
 - 4 possible actions each representing one or more other players in the supply chain and each
 - 5 having a payoff corresponding to each goal; and
 - 6 means for recommending one of the actions based on at least one of the historical
 - 7 behavior and commitments of the other players such that the payoffs are maximized for all
 - 8 players.
- 1 2. The apparatus of claim 1, wherein each player is represented by at least one agent and means for identifying a player comprises:
 - 3 means for identifying a requesting agent representing the player.
- 1 3. The apparatus of claim 2, wherein means for recommending comprises:
 - 2 means for identifying an action for the requesting agent, the action identifying one or
 - 3 more customer agents with which the requesting agent should interact.
- 1 4. The apparatus of claim 3, wherein means for recommending further comprises:
 - 3 means for generating a decision model that describes the past behavior of competitor
 - 4 agents that compete with the requesting agent to interact with the customer; and
 - 5 means for selecting from the decision model past decisions that are relevant to the
 - 6 requesting agent.
- 1 5. The apparatus of claim 4, wherein means for recommending further comprises:
 - 3 means for combining the past decisions with a model of each competitor agent,
 - 4 thereby producing a payoff matrix for each competitor agent, each payoff matrix associating
 - 5 a value with each possible combination of customer agents.

1 6. The apparatus of claim 5, wherein means for recommending further
2 comprises:

3 means for selecting one of the competitor agents based on a cooperation index
4 indicating the level of past cooperation between each competitor agent and the requesting
5 agent.

1 7. The apparatus of claim 6, wherein means for recommending further
2 comprises:

3 means for selecting the combination of customer agents having the highest value in
4 the payoff matrix associated with the selected competitor agent.

1 8. A method comprising:

2 identifying a player in a supply chain, the player having one or more goals;

3 identifying a decision in the supply chain, the decision having a plurality of possible
4 actions each representing one or more other players in the supply chain and each having a
5 payoff corresponding to each goal; and

6 recommending one of the actions based on at least one of the historical behavior and
7 commitments of the other players such that the payoffs are maximized for all players.

1 9. The method of claim 8, wherein each player is represented by at least one
2 agent and identifying a player comprises:

3 identifying a requesting agent representing the player.

1 10. The method of claim 9, wherein recommending comprises:

2 identifying an action for the requesting agent, the action identifying one or more
3 customer agents with which the requesting agent should interact.

1 11. The method of claim 10, wherein recommending further comprises:

2 generating a decision model that describes the past behavior of competitor agents that
3 compete with the requesting agent to interact with the customer; and

4 selecting from the decision model past decisions that are relevant to the requesting
5 agent.

1 12. The method of claim 11, wherein recommending further comprises:
2 combining the past decisions with a model of each competitor agent, thereby
3 producing a payoff matrix for each competitor agent, each payoff matrix associating a value
4 with each possible combination of customer agents.

1 13. The method of claim 12, wherein recommending further comprises:
2 selecting one of the competitor agents based on a cooperation index indicating the
3 level of past cooperation between each competitor agent and the requesting agent.

1 14. The method of claim 13, wherein recommending further comprises:
2 selecting the combination of customer agents having the highest value in the payoff
3 matrix associated with the selected competitor agent.

1 15. A computer program product, tangibly stored on a computer-readable
2 medium, comprising instructions operable to cause a programmable processor to:
3 identify a player in a supply chain, the player having one or more goals;
4 identify a decision in the supply chain, the decision having a plurality of possible
5 actions each representing one or more other players in the supply chain and each having a
6 payoff corresponding to each goal; and
7 recommend one of the actions based on at least one of the historical behavior and
8 commitments of the other players such that the payoffs are maximized for all players.

1 16. The computer program product of claim 15, wherein each player is
2 represented by at least one agent and instructions operable to cause a programmable
3 processor to identify a player comprise instructions operable to cause a programmable
4 processor to:
5 identify a requesting agent representing the player.

1 17. The computer program product of claim 16, wherein instructions operable to
2 cause a programmable processor to recommend comprise instructions operable to cause a
3 programmable processor to:

4 identify an action for the requesting agent, the action identifying one or more
5 customer agents with which the requesting agent should interact.

1 18. The computer program product of claim 17, wherein instructions operable to
2 cause a programmable processor to recommend further comprise instructions operable to
3 cause a programmable processor to:

4 generating a decision model that describes the past behavior of competitor agents that
5 compete with the requesting agent to interact with the customer; and

6 selecting from the decision model past decisions that are relevant to the requesting
7 agent.

1 19. The computer program product of claim 18, wherein instructions operable to
2 cause a programmable processor to recommend further comprise instructions operable to
3 cause a programmable processor to:

4 combining the past decisions with a model of each competitor agent, thereby
5 producing a payoff matrix for each competitor agent, each payoff matrix associating a value
6 with each possible combination of customer agents.

1 20. The computer program product of claim 19, wherein instructions operable to
2 cause a programmable processor to recommend further comprise instructions operable to
3 cause a programmable processor to:

4 selecting one of the competitor agents based on a cooperation index indicating the
5 level of past cooperation between each competitor agent and the requesting agent.

1 21. The computer program product of claim 20, wherein instructions operable to
2 cause a programmable processor to recommend further comprise instructions operable to
3 cause a programmable processor to:

- 4 selecting the combination of customer agents having the highest value in the payoff
- 5 matrix associated with the selected competitor agent.